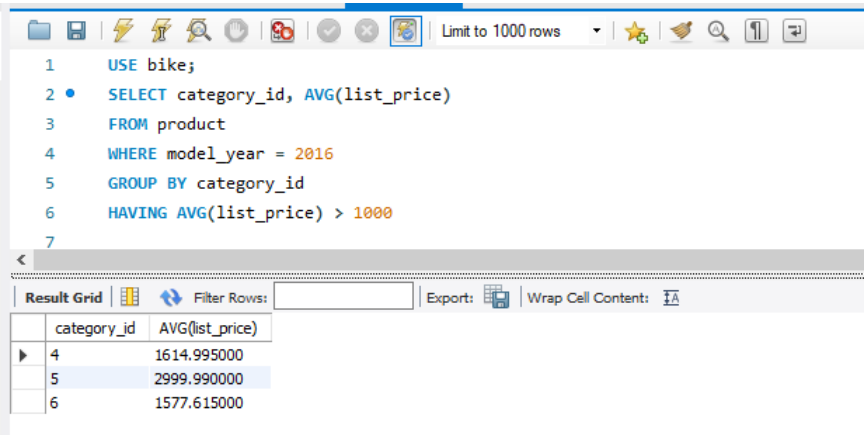
5.5

Using the HAVING and WHERE Clauses Together

Below is an example of a statement that includes both the HAVING and WHERE clause in the same SQL statement.

```
USE bike;
SELECT category_id, AVG(list_price)
FROM product
WHERE model_year = 2016
GROUP BY category_id
HAVING AVG(list_price) > 1000
```

Output:

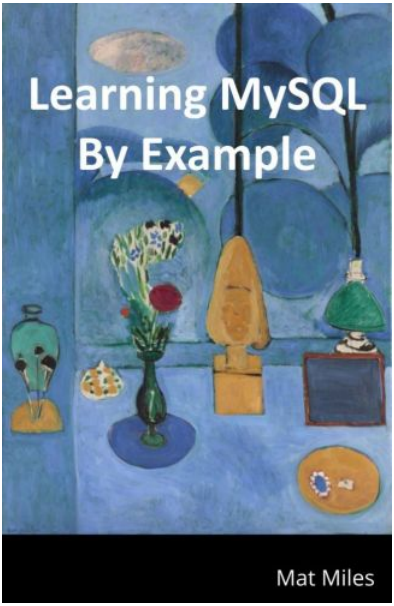


WHERE model_year = 2016

- The **WHERE** clause executes before the **GROUP BY**
- You can refer to columns not defined in the **SELECT**
- You cannot use aggregate functions in the **WHERE**

HAVING AVG(list_price) > 1000

- The **HAVING** clause executes after the **GROUP BY** clause but before the **SELECT**
- If you use an aggregate function in the **HAVING** clause, you must include the same aggregate function in the **SELECT**
- If you reference a column or expression in the **HAVING** clause, you must include the same column or expression in the **SELECT**
- You cannot use aggregate functions in a **WHERE**



Miles, M. (2021). *Learning MySQL By Example*. EdTech Books. https://edtechbooks.org/learning_mysql